

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Motion to Authorize the City Manager to Execute an Agreement with AltaTerra Consulting LLC for the Hidden Lake Management Plan Feasibility Study
DEPARTMENT:	Public Works
PRESENTED BY:	Brian Landau, Surface Water and Environmental Services Manager
ACTION:	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

PROBLEM/ISSUE STATEMENT:

Hidden Lake, a stormwater facility in Boeing Creek that was constructed by King County in 1996, is the most expensive stormwater facility in the City to maintain. Since 2002, the sediment removal costs for the facility equal close to \$600,000. In 2013 alone, the maintenance cost for the removal of sediment was \$104,366.

At the August 5, 2013 Council Meeting, Council supported staff's recommendation to remove sediment from the facility in 2013 and conduct a feasibility study in 2014 to determine the best management approach to address Hidden Lake for the long-term. The goal of the feasibility study is to reduce long term maintenance costs at Hidden Lake. The other issues to be considered in the stream reach of Boeing Creek include bank erosion that has affected the adjacent recreational trail and log weirs that may not be passable to fish at different stages of stream flow.

FINANCIAL IMPACT:

The 2014-2019 Capital Improvement Program includes \$100,000 for the Hidden Lake Management Plan Feasibility Study.

RECOMMENDATION

Staff recommends that Council move to authorize the City Manager to execute an agreement with AltaTerra Consulting LLC in the amount of \$98,400 to provide consultant services for the Hidden Lake Management Plan Feasibility Study.

Approved By: City Manager **DT** City Attorney **IS**

BACKGROUND

At the August 5, 2013 Council Meeting, Council supported staff's recommendation to remove sediment from the Hidden Lake stormwater facility in 2013 and conduct a feasibility study in 2014 to determine the best management approach to address Hidden Lake for the long-term. The Hidden Lake Maintenance Feasibility Study was also a suggested study as part of the Boeing and Storm Creek Basin Plan and is part of the basin planning program in the Surface Water Master Plan adopted by Council in 2011.

The City of Shoreline spends much of its total stormwater operation and maintenance budget on sediment removal at Hidden Lake. The history of Hidden Lake spans nearly a century, from the time Mr. William Boeing first dammed Boeing Creek to create a fishing pond and small hatchery near his estate. Since then, the area surrounding Hidden Lake has been developed into an established residential community, Shoreline Community College and neighboring parks and open space have been created. The Aurora Avenue Corridor development of the 1960s and 1970s has impacted Boeing Creek through greatly increased stormwater discharges. The geology and topography of the Boeing Creek system is particularly susceptible to erosion and landslides.

Prior to Shoreline's incorporation in 1995, King County made many attempts to reduce these impacts, including the construction of the M1 dam, channel hardening between the M1 dam and the confluence of the north and south forks of Boeing Creek, and construction of the Boeing Creek Detention Pond. Modifications on Boeing Creek also include a water supply dam and the railroad crossing at the mouth of the creek. Hidden Lake itself has undergone modifications, with reconstruction in the mid-1990s creating a sedimentation basin that could be dredged as needed to maintain open-water habitat.

This study will review the current conditions of Hidden Lake against the goals of the Surface Water Utility, including flood reduction, erosion control or water quality improvement. Hidden Lake was constructed for the purpose of habitat enhancement by reducing the amount of sediment that moves downstream. Of note, much of the sediment is highly mobile and is transported to Puget Sound. In addition, recent water quality monitoring has shown that water quality is not improved by the existence of a maintained lake.

The long-term maintenance and management of the Hidden Lake facility needs to be carefully evaluated. The King County design underestimated the volume of sediment that would need to be removed annually, which has a substantial cost over time. The facility maintenance costs since 2002 (including this year) will equal close to \$600,000. This is over half the original capital cost of the facility.

While the easement agreement is terminable by the City, any change to the maintenance strategy could have real or perceived impacts to the value of adjacent property. At the August 5, 2013 Council Meeting, Council supported the staff recommendation to remove sediment from the facility in 2013 and conduct a feasibility study in 2014 to determine the best management approach to address Hidden Lake for the long-term.

The specific project objectives for the Hidden Lake Management Plan Feasibility Study are:

- Identify alternatives that will reduce the net maintenance cost for managing Hidden Lake.
- Identify capital projects or strategies that can be incorporated in the City's next 6-year Capital Improvement Program (CIP).
- Maintain or improve water quality in Hidden Lake and Boeing Creek.

COUNCIL GOAL(S) ADDRESSED

This project will address Council Goal #2, provide safe, efficient and effective infrastructure to support our land use, transportation and surface water plans. This project will meet this goal by repairing or replacing the City's storm water infrastructure.

RESOURCE/FINANCIAL IMPACT

The 2014-2019 Capital Improvement Program includes \$100,000 for conducting a Feasibility Study for the maintenance and management of Hidden Lake. Below is a breakdown of the funding for the 2014 Storm Water Pipe Replacement Program project:

EXPENDITURES

Project Administration:

Consultant Study	\$98,400
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Total Project Cost	\$98,400

CIP BUDGET

Hidden Lake Feasibility Study	\$100,000
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Total Budget	\$100,000

RECOMMENDATION

Staff recommends that Council move to authorize the City Manager to execute an agreement with AltaTerra Consulting LLC in the amount of \$98,400 to provide consultant services for the Hidden Lake Management Plan Feasibility Study.